5Gbps USB-C 3.2 Gen 1 Extender over CAT6a (100m/328ft)

TX/RX Kit with Bi-Directional 24V PoC, RS-232 Pass-Through & FSYNC GPIO Support

MPN: EXT-USBC-100M

1 PRODUCT OVERVIEW

DESIGNED FOR

AV/IT integrators, systems designers, and enterprise IT professionals specifying USB peripheral extension for conference rooms, classrooms, industrial automation, and medical or security environments.

THE CHALLENGE

USB cables max out at 16ft (5m) for USB 3.2 Gen 1. Active USB cables extend to ~33ft. Neither solution reaches the rack rooms, back-of-house equipment closets, or 100m runs required in commercial and industrial deployments.

THE KANEXPRO ADVANTAGE

5Gbps USB 3.2 Gen 1 over a single shielded CAT6a cable to 100m. Bidirectional PoC from either end. Mixed USB-C + USB-A ports on both TX and RX. RS-232 + FSYNC GPIO pass-through. Plug-and-play, no drivers. Metal enclosure.

2 PRODUCT POSITIONING

> ***EXT-USBC-100M is the professional USB 3.2 extension kit for AV/IT integrators who need reliable 5Gbps USB-C connectivity at 100 meters without video, over existing CAT6a infrastructure.***

3 APPLICATIONS

Conference Rooms

Extend webcams, PTZ cameras, speakerphones, and touch panels from a rack room to a remote collaboration space up to 328ft away.

PTZ & Camera Systems

Connect PTZ cameras, USB capture devices, or industrial cameras to a remote host over a single CAT6a cable with no active repeaters.

Classrooms

Mount USB devices at the podium or student stations; extend the host connection to a secure AV rack without exposing the PC.

Industrial Automation

Use FSYNC GPIO to synchronize multi-camera vision systems over long cable runs in factories and production lines.

Medical Carts

Deploy USB peripherals on mobile medical carts with the host in a secure server room — bidirectional PoC powers the cart-end RX.

Security Systems

Extend USB cameras or biometric readers from a secure access control panel to a remote host up to 328ft over shielded CAT6a.

4 WHO THIS IS FOR

AV/IT Integrators | Corporate AV | Education | Industrial | Healthcare | Security

Ideal User	AV/IT integrator or enterprise IT professional specifying USB extension for permanent commercial installs.
Project Types	Conference rooms, classrooms, industrial automation, medical facilities, security/access control.
Typical Buyer	AV/IT integrator (specifier); IT director or facilities manager (approver).

5 KANEXPRO PRODUCT COMPARISON

EXT-USBC-100M is the USB-only extension product in the KanexPro USB extender family:

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
EXT-USBC-100M	This product	USB-C host, 5Gbps, 100m, RS-232, FSYNC GPIO, PoC	USB-only — no video output; for pure USB peripheral extension
EXT-USBC2XI-100M	Same family	Same, adds USB-B host + auto/manual switching	Use when legacy USB-B hosts are present alongside USB-C
EXT-USBCPD4K-70M	Same family	4K60 video + USB 2.0 + 100W PD, 70m	Use when BYOD 4K display + charging is required at the display end
EXT-USBCPD2X4K-100M	Same family	Dual-host, dual 4K HDMI, 100W PD, audio, 100m	Full AV docking extension for dual-laptop/dual-display environments

▶ **EXT-USBC-100M is the right choice when pure USB 3.2 Gen 1 extension to 100m is needed without video output.**

6 FREQUENTLY ASKED QUESTIONS

Q: What USB host connectors does the TX accept?
One USB Type-C (24-pin) female connector. A USB-A host is not supported — the TX is designed for modern USB-C PCs. If a USB-A host is required, use a USB-A to USB-C adapter or consider EXT-USBC2XI-100M which adds a USB-B host port.

Q: Can I power the system from the receiver end?
Yes. Bidirectional 24V PoC allows the power supply to be connected to either TX or RX. The powered unit supplies 24V over the CAT6a cable to the other.

Q: What is the FSYNC GPIO port for?
FSYNC GPIO (0–5V) synchronizes industrial cameras across the full extension link — enabling multi-sensor automation systems and frame-synchronized vision deployments without a separate sync cable.

Q: Does it require any drivers or software?
No. Plug-and-play on Windows, macOS, Linux, and most industrial controller environments.

Q: What cable type is required?
CAT6a (F/FTP) shielded, up to 100m. Standard CAT6 or CAT5e is not supported. Both ends must be T568B terminated.

Q: How many USB devices can be connected simultaneously?
Up to 7 total: TX (1× USB-C + 2× USB-A device ports) + RX (2× USB-C + 2× USB-A device ports).

Q: Is it backward compatible with USB 2.0 devices?
Yes — USB 3.2 Gen 1 is fully backward compatible with USB 2.0 and USB 1.1 devices.

7 SALES ANALYSIS

Channel Fit	AV distribution (two-step); IT/AV resellers (CDW, B&H, Amazon); project-based direct for enterprise and industrial.
Deal Size	1–6 units per conference room or classroom project. 10–50 units for enterprise rollouts or industrial multi-station deployments.
Sales Cycle	3–8 weeks for AV/IT project specification. Shorter for in-stock reseller orders.
Key Objections	"Can’t you just use an active USB cable?" (answer: max 33ft, no RS-232/FSYNC, no PoC, no device hub). "Why not IP-based USB?" (answer: IP introduces latency; HDBaseT is zero-latency, plug-and-play, no network setup).
Win / Loss Themes	Win on: 100m range, FSYNC GPIO, RS-232, mixed USB-C/A ports, PoC, plug-and-play. Lose on: no video output (upsell to EXT-USBCPD4K-70M); USB-A host requires adapter.
Top Use Cases	1. Conference room USB hub extension (PTZ + speakerphone + touch panel from rack); 2. Industrial multi-camera FSYNC synchronization.